



Countdown to GHS COMPLIANCE

The first phase of new OSHA requirements for hazard communication goes into effect Dec. 1. Are your workers trained?

By Kyle W. Morrison, senior associate editor



SHA's revised Hazard Communication Standard is one of the most sweeping regulations the agency has issued in recent years, and compliance deadlines are approaching.

Published in March 2012, the final rule incorporates the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals, commonly known as GHS. The idea behind GHS is to make hazard warnings and labels found on products easier for workers to understand.

The requirements in OSHA's updated standard will take effect in several phases. The first comes up later this year: All workers who come in contact with hazardous chemicals must be trained by Dec. 1 on the new requirements of the revised standard.

Specifically, employees must be trained on the new format of Safety Data Sheets (formerly known as Material Safety Data Sheets) and new labels, which include pictograms and signal words.

Although the compliance date is a few months away, it is best to begin training employees on the new requirements immediately, safety professional Daniel Levine notes.

"Waiting until the last minute is probably not going to help," said Levine, president of Monroe Township, NJ-based consulting firm Product Safety Solutions. "People are starting to use these symbols now."

Training requirements

To be clear, the requirement to train employees on hazard communication is not new, said Michelle Baker, product stewardship manager for Louisville, KY-based Zeon Chemicals. The new compliance date is for bringing employees up to speed on changes to the standard, and is in addition to the training employers already should have been conducting.

"Employers should have always been training their employees," she said. "They always should have been able to recognize the hazards of the chemical with which they work. That requirement is not new and it hasn't changed."

Photo: Brady Worldwide Inc.

The training should be fairly straightforward and not difficult for employers to present, Levine said, as OSHA has outlined what should be included.

However, according to Baker, problems could arise if workers have not been previously trained on hazcom because they likely will not understand the basics of chemical hazards, labels and SDSs.

Training on the changes may then become more difficult, she said, because “you’re adding something new to what already may be confusing.”

For employers with an established hazcom training program, Baker suggested reviewing that program as the new elements from the revised standard are incorporated.

Labels

Employers must make SDSs available to employees for review, but employees are not required to look at them. However, the new labels are going to be on every container with hazardous materials, and employees will undoubtedly encounter them – if they have not already. Although manufacturers and distributors do not have to adhere to the hazcom standard’s new labeling and SDS requirements until 2015, they can begin following them now, said Levine, who recommended employers emphasize the label aspect of employee training.

According to OSHA, employees can expect to see the following on the new labels:

Product identifier. This can include information such as the name of the chemical and/or a code or batch number. This identifier must be identical to Section 1 of the SDS.

Signal word. This indicates the severity of the hazards, using the words “Danger” or “Warning.” “Danger” is for severe hazards, while “Warning” is for less severe hazards. Only one of these signal words will appear on the label, regardless of the number of hazards a chemical may pose.

Pictograms. Perhaps the most visible change to the labels is that every chemical is required to have a diamond shape with a symbol inside that represents a specific hazard category. Eight mandatory pictograms cover everything from health hazards and flammability to corrosions and explosions.

A ninth pictogram, dealing with environment, is not mandated by OSHA, but Levine recommended employees be trained because they should know what it means in case they come across it.

Hazard statement. This describes the nature of the hazards. All hazard statements of a chemical must be listed on the label, including a description of what adverse health effects the chemical can cause.

Precautionary statement. This is a phrase describing recommended measures to either minimize or prevent the adverse effects from the chemical due to exposure or improper storage.

Supplier information. The name, address and phone number of the chemical’s manufacturer, distributor or importer is included on the label.



Safety Data Sheets

The other major component employees must be trained on is the SDS. (The name was changed from MSDS to be more consistent with the term used worldwide.)

“The data sheets are a more complex issue, but I honestly don’t know how many employees routinely request the data sheets,”

Levine said.

Even still, employees must be trained on the format of SDSs. But simply giving employees a data sheet does not equal training, Levine warned – a stance OSHA has held since the original hazcom standard.

OSHA requires training to address the standardized 16-section format of the SDS:

Section 1: Identification, which includes elements found on the label such as product identifier and contact information

Section 2: Hazard identification of the label elements, including the signal word, hazard and precautionary statements, and pictogram

Section 3: Ingredient composition and information, which for substances includes the chemical name and its synonyms; for mixtures, the same details as required for substances, but also must specify the concentration of each ingredient

Section 4: First aid measures

Section 5: Firefighting measures

Section 6: Accidental release measures, including instructions for evacuations, containment methods and cleanup procedures

Feature at a Glance

OSHA’s updated Hazard Communication Standard mandates that all employees be trained on the final rule’s changes by Dec. 1.

Key points

- Employees must be trained on two new requirements: labels and Safety Data Sheets.
- Training should include an opportunity for employees to ask questions, and entail more than simply handing over an SDS.
- Stakeholders recommend not waiting for the deadline before training employees.



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Section 7: Handling and storage guidance

Section 8: Exposure controls and personal protection, including permissible exposure limits, engineering controls and recommended personal protective equipment

Section 9: Physical and chemical properties, including its appearance, odor, flammability or explosive limits, and melting or freezing points

Section 10: Stability and reactivity of the chemical

Section 11: Toxicological information, which addresses the likely routes of exposure and a description of exposure effects

Sections 12-15: Non-mandatory sections that might include ecological information, disposal considerations, transportation information and regulatory information

it could be as short as 30 minutes, depending on the type of questions employees ask. Employees may have several questions on the new requirements, and employers should be prepared to answer them, he said.

Some questions may include:

What's new?

Regardless of who created the label, it will include a harmonized signal word, pictogram and hazard statement, as well as a precautionary statement. The SDSs will be in a specific 16-section format.

How soon will we see changes?

Changes to the labels and SDSs already may be seen, as manufacturers and distributors have been allowed to use them. However, the date for full compliance – when employees should see the new labels on everything – is June 1, 2015. Distributors are not allowed to ship containers with non-GHS-compliant labels beginning Dec. 1, 2015.

What is the difference between OSHA's and the National Fire Protection Association's hazard categories?

This is the area that may bring the most confusion, according to Baker. OSHA's hazard category is a numerical system, ranking hazards based on their severity. A hazard category of 1 is more severe than 4. Manufacturers, for example, would use the hazard category to determine which hazard statements to include on the labels and SDSs.

NFPA's chemical hazard rating system

is inverted – 0 is the least severe and 4 is the most severe.


However, many workers may not be affected, Baker said, as the hazard category will not be found on the label.

Is it going to make things safer for me?

Likely yes, stakeholders say. The updated hazcom rule standardizes many elements, which will help employees become aware of hazards they should know about. For workers who are unable to read or understand what is written on the label, the pictogram will convey general information about the hazard of a product, which will allow the worker to take certain precautions.

"Now with the GHS, we can hope for better harmonization so that we'll see more harmony and less confusion," Baker said. "It is better for the industry and it is better for workers." ☺

SAMPLE LABEL

CODE Product Name _____	} Product Identifier	Hazard Pictograms 
Company Name Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____		
} Supplier Identification		Signal Word Danger
Precautionary Statements Keep container tightly closed. Store in a cool, well-ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified. In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO ₂) fire extinguisher to extinguish. First Aid If exposed call Poison Center. If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.		
		Hazard Statements Highly flammable liquid and vapor. May cause liver and kidney damage.
		Supplemental Information Directions for Use _____ _____ _____ Fill weight: _____ Lot Number: _____ Gross weight: _____ Fill Date: _____ Expiration Date: _____

OSHA 3492-02 2012

Source: OSHA

Section 16: Other information, such as when the SDS was prepared or when a revision was made

Although the content within each of these sections may change depending on the material, the type of information conveyed by the individual sections will remain unchanged. For example, Section 4 will always contain first aid measures for the product and Section 7 will always address handling and storage guidance.

The biggest change to the SDSs, according to Levine, is the information one would expect to find on the label also will be on the SDS – such as the information in Section 2 – and the wording should be identical. This differs from previous requirements, in which many label elements did not have to appear on the SDS.

Employee questions

At press time, OSHA had not released information on how long the new training should last, but Levine suggested

Find more information about the Hazard Communication Standard and its requirements at safetyandhealthmagazine.com.